

- 20 -

CLAIMS

1. The use, as a biopesticide, of a composition comprising diallyl sulfide (DAS), diallyl disulfide
5 (DAS2), diallyl trisulfide (DAS3) and diallyl tetrasulfide (DAS4), the sum by weight of which is at least one milligram per gram of composition.
2. The use as claimed in claim 1, for controlling
10 pests of agricultural products and foodstuffs, and wood and textile pests.
3. The use as claimed in claim 1, for controlling
15 human and animal infestation with lice or other sucking insects.
4. A biopesticide comprising a composition, characterized in that it contains diallyl sulfide (DAS), diallyl disulfide (DAS2), diallyl trisulfide
20 (DAS3) and diallyl tetrasulfide (DAS4), the sum by weight of which is at least one milligram per gram of composition, and formulation adjuvants.
5. The biopesticide as claimed in claim 4,
25 characterized in that at least 50% of the diallyl polysulfides (DAS_n) consists of DAS2 and DAS3.
6. The biopesticide as claimed in either of claims 4 or 5, characterized in that it comprises an extract of
30 garlic.
7. A method of producing a composition containing DAS, DAS2, DAS3 and DAS4, the sum by weight of which is at least one milligram per gram of composition,
35 comprising the steps consisting in milling the garlic under hot conditions and subsequently recovering the volatile fractions, then a step consisting in pressing the garlic followed by a step consisting in filtering the pressed garlic, and then a step consisting in

- 21 -

concentrating under vacuum and subsequently recovering the volatile fractions.

8. The method as claimed in claim 7, comprising a
5 step consisting in inhibiting the enzymatic activity of the garlic by means of an appropriate thermal treatment applied before the extraction.

9. The method as claimed in claim 7, comprising a
10 step consisting in inhibiting the enzymatic activity of the garlic by means of an appropriate acidification.

10. The method as claimed in any one of claims 7 to 9,
15 comprising a step consisting in using sulfites so as to prevent oxidation phenomena.

11. A composition containing DAS, DAS2, DAS3, DAS4,
the sum by weight of which is at least one milligram
per gram of composition, and gamma-glutamyl-S-
20 allylcysteine (Gluacs), characterized in that it can be produced by means of the method as defined in any one of claims 7 to 10.

12. A composition, characterized in that it contains
25 diallyl sulfide (DAS), diallyl disulfide (DAS2), diallyl trisulfide (DAS3) and diallyl tetrasulfide (DAS4), the sum by weight of which is at least one milligram per gram of composition, and in that it contains Gluacs.

30 13. The composition as claimed in claim 12, characterized in that at least 50% of the diallyl polysulfides (DASn) consists of DAS2 and DAS3.

35 14. The composition as claimed in either of claims 12 and 13, characterized in that it comprises an extract of garlic.

15. The composition as claimed in claim 14,

- 22 -

characterized in that the sulfur-containing compounds consisting of diallyl polysulfides (DASn), allyl methyl polysulfides (AMSn), dimethyl polysulfides (DMSn), allyl propyl polysulfides (APSn), methyl propyl polysulfides (MPSn), dipropyl polysulfides (DPSn), dimethyl thiosulfinate (TiM2) and allicin (TiA2) are predominant in the extract of garlic.

16. The composition as claimed in claim 14, characterized in that the sulfur-containing compounds consisting of diallyl polysulfides (DASn), dimethyl disulfide (DMS2), dipropyl disulfide (DPS2), dimethyl thiosulfinate (TiM2) and allicin (TiA2) are predominant in the extract of garlic.

17. The composition as claimed in claim 14, characterized in that the DASn represent more than 50% of the sulfur-containing compounds of the extract of garlic.

18. The composition as claimed in claim 14, characterized in that it contains allicin.

19. The composition as claimed in claim 14, characterized in that it contains alliin.